

ABSTRACT OF THE DISCLOSURE

A manufacturing method of a semiconductor device having a trench is provided to form, at a corner portion of the trench, an oxide film which is greater in thickness and
5 smaller in stress than at other portions. When the trench formed in the semiconductor substrate is oxidized, it is oxidized in an oxygen environment containing dichloroethylene at a predetermined weight percent to allow the formation of an oxide film having a greater thickness at the corner portion of the trench than thickness at other portions, whereby the semiconductor device improving dielectric breakdown
10 characteristics can be obtained.